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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,829	04/13/2004	Shmuel Levy	P-6389-US	3259

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EXAMINER

NGUYEN, LEON VIET Q

ART UNIT	PAPER NUMBER
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2611

MAIL DATE	DELIVERY MODE
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08/19/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/822,829	Applicant(s) LEVY, SHMUEL	
	Examiner LEON-VIET Q. NGUYEN	Art Unit 2611	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 10 August 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
 b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☐ They raise the issue of new matter (see NOTE below);
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
 5. ☐ Applicant's reply has overcome the following rejection(s): _____.
 6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
 The status of the claim(s) is (or will be) as follows:
 Claim(s) allowed: _____.
 Claim(s) objected to: _____.
 Claim(s) rejected: 1-3,6,7,9,10,13,15,19,20,22 and 24.
 Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
 See continuation Sheet.
 12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____.
 13. ☐ Other: _____.

/Chieh M Fan/
 Supervisory Patent Examiner, Art Unit 2611

Regarding claim 1 does not teach or suggest a MIMO system where each symbol of the data stream is coded either according to a diversity mode or a multiplexing mode according to a feedback data packet having a coding information related to the selected OFDM subcarrier symbol (Remarks page 8 fifth paragraph).

Specifically, applicant asserts that the combination of the references do not disclose or fairly suggest "adaptively selecting a coding mode of each orthogonal frequency division multiplexing (OFDM) sub-carrier symbol of a data stream to be coded either in a diversity mode or to be coded in a multiplexing mode according to a feedback data packet having a coding information related to the selected OFDM subcarrier symbol ..." as claimed in independent base claim 1 and "...coding each symbol of the first subset of sub-carriers and the second subset of carrier is done according to a feedback data packet having a coding information of each selectable OFDM subcarrier symbol..." as claimed in independent claim 6 (Remarks page 9 third paragraph).

Examiner respectfully disagrees.

As stated in the previous office action, with regards to claim 1, Greenstein teaches adaptively selecting a coding mode (col. 4 line 63 - col. 5 line 1) of each orthogonal frequency division multiplexing sub-carrier symbol of a data stream (col. 3 lines 59-63) according to a feedback data packet having a coding information of the OFDM subcarrier symbol (col. 4 lines 1-5). The selection diversity method taught by Greenstein involves selecting one transmission processing circuit while de-selecting another transmission processing circuit. This on-off selection is done with respect to a cluster of tones and is thus interpreted to be adaptive. Furthermore a feedback signal controls the appropriate adaptation of transmission signals through the particular transmission processing circuit based on the signal strength. Although Greenstein does not explicitly teach that the two transmission processing circuits perform coding in multiplexing and diversity modes, AAPA does (¶0002) and it would have been obvious to incorporate those well-known coding techniques taught by AAPA into the method of Greenstein.

Furthermore, with regards to claim 6 and as stated above, a feedback signal controls the appropriate adaptation of transmission signals through the particular transmission processing circuit (col. 4 lines 1-12 of Greenstein) based on the signal strength (col. 4 lines 53-58 of Greenstein).

The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Regarding claims 9 and 19, applicant asserts that the combined references do not teach a coding mode selector to select a coding mode of a symbol of said first and second orthogonal frequency division multiplexing (OFDM) sub-carriers symbols streams according to a feedback data packet having coding information of the OFDM subcarrier symbol wherein, the coding mode is selected from a diversity mode and spatial multiplexing mode for each symbol of the OFDM sub-carriers symbol stream according to the coding information of the feedback data packet" (Remarks page 10 first paragraph).

Examiner respectfully disagrees.

Kim teaches an adaptive controller that selects an encoding method according to a feedback signal (111 in fig. 1, ¶0047). Although Kim does not explicitly teach a first and second OFDM symbol stream, it would be obvious to have multiple symbol streams since the system of fig. 1 is an MIMO system. MIMO systems are well-known in the art to transmit several streams to the receiver. Furthermore, AAP was relied upon to teach coding in multiplexing and diversity modes (page 9 of the previous OA) and it would have been obvious to incorporate those well-known coding techniques taught by AAPA into the system of Kim.